

ABSTRACT

A dry scrubbing system for treatment of effluent from an upstream effluent-generating process. The dry scrubbing system accommodates operation in a process window involving substantial variation in process conditions, e.g., flow rate and/or concentration, of scrubbable gas species in the effluent. Multiple scrubbing media are utilized in the dry scrubbing system, each optimal in a regime of the operating window, and together ensuring at least a predetermined level of removal of scrubbable gas species over the entire operating window. In a specific aspect, gaseous phosphorus in the effluent is abated by use of potassium hydroxide as an active abatement agent.